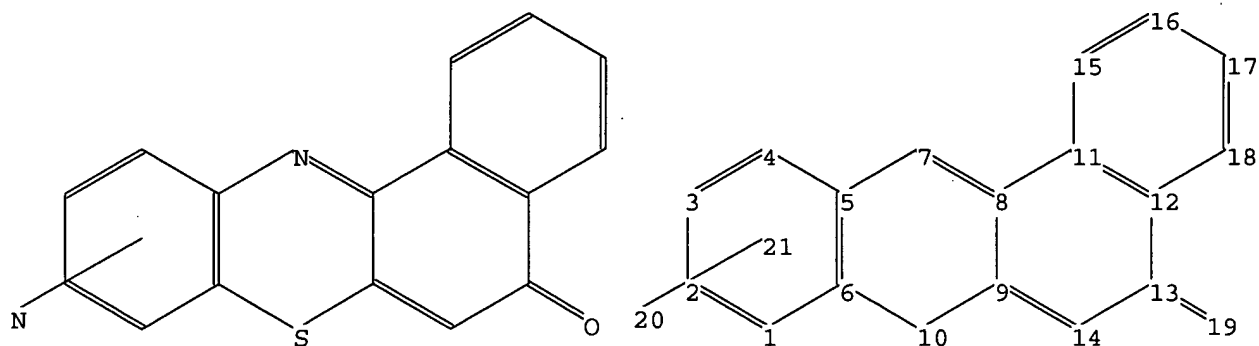


Broad Search

chain nodes :

19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

13-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 11-12 11-15
12-13 12-18 13-14 15-16 16-17 17-18

exact/norm bonds :

5-7 6-10 7-8 8-9 8-11 9-10 9-14 12-13 13-14 13-19

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-15 12-18 15-16 16-17 17-18

Match level :

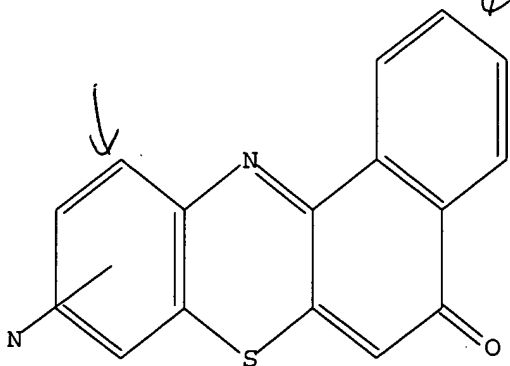
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 10:05:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 182 TO ITERATE

100.0% PROCESSED 182 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2831 TO 4449
PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 10:05:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3821 TO ITERATE

100.0% PROCESSED 3821 ITERATIONS 44 ANSWERS
SEARCH TIME: 00.00.01

L3 44 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	161.33	161.54

FILE 'CAPLUS' ENTERED AT 10:05:57 ON 11 MAY 2005
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FILE LAST UPDATED: 10 May 2005 (20050510/ED)

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=> s l3

L4 12 L3

=> d ibib abs hitstr tot

<05/11/2005>

Habte

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
DOCUMENT NUMBER:TITLE:
Nile red type compound emitting red light, process for producing the same, and luminescent element utilizing the same

INVENTOR(S): Nakaya, Tadao; Tajima, Akio; Saikawa, Tomoyuki; Takano, Shinji; Yamauchi, Takao; Mori, Hidemasa

PATENT ASSIGNEE(S): Taiho Industries, Co. Ltd., Japan

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

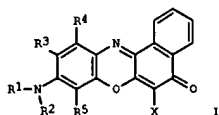
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062213	A1	20030731	WO 2003-JP477	20030121
R: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, EG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003277371	A2	20031002	JP 2002-14881	20020123
JP 2004018400	A2	20040122	JP 2002-172127	20020612
JP 2003277369	A2	20031002	JP 2003-12498	20030121
EP 1475372	A1	20041110	EP 2003-701142	20030121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPL. INFO.:				
JP 2002-12222 A 20020121				
JP 2002-12224 A 20020121				
JP 2002-14881 A 20020123				
JP 2002-172127 A 20020612				
JP 2001-313245 A 20011010				
WO 2003-JP477 W 20030121				

OTHER SOURCE(S): MARPAT 139:157136
GI

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
DOCUMENT NUMBER:TITLE:
Rifamycin derivatives for treatment of AIDS and pharmaceutical compositions containing them
INVENTOR(S): Domoto, Takashi; Shiraishi, Tadayoshi; Yamane, Takehiko; Yamashita, Katsuji; Hidaka, Takayoshi; Watanabe, Kiyoshi

PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXKAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01175938	A2	19890712	JP 1987-332906	19871229
PRIORITY APPL. INFO.:				
JP 1987-332906				

OTHER SOURCE(S): MARPAT 112:132457
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title comds. [I or II; R = O, S; R1, R2 = H, alkyl, cycloalkyl, Ph, alkenyl, etc.] are useful as antiviral agents especially against the AIDS virus.

According to a test using the procedure described in Science (volume 170, page 447-449, 1967), the IC50 values of I against reverse transcriptase ranged 22-50 µg/mL. The cytotoxicity and acute toxicity of I were also studied. A tablet, a capsule, a powder, and an injection containing I or II were formulated. II may be prepared by reduction of I.

IT 102865-45-2 125749-04-4 125749-05-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(retrovirus inhibition by)

RN 102865-45-2 CAPLUS
CN Rifamycin VIII, 5'-[methyl(2-methylpropyl)amino]-8'-thia- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

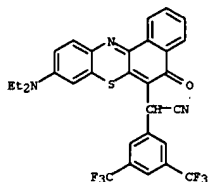
AB The invention relates to a Nile red-based red-emitting compound represented by I [R1(2) = H and alkyl; R3(R5) = H and may combine with R1(R2) to form a ring; R4 = H and may combine with R3 to form a ring; X = H, halo, and -CH(CN)Ar]. The compound is suited for use as a red-emitting material in an organic light emitting device.

IT 569686-16-4P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(Nile red type compound for red-emitting organic LED)

RN 569686-16-4 CAPLUS

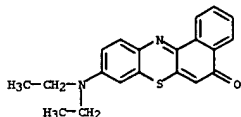
CN 5H-Benzo[a]phenothiazine-6-acetonitrile, α-(3,5-bis(trifluoromethyl)phenyl)-9-(diethylamino)-5-oxo- (9CI) (CA INDEX NAME)

IT 74682-48-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Nile red type compound for red-emitting organic LED)

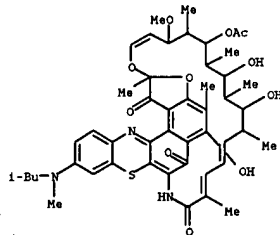
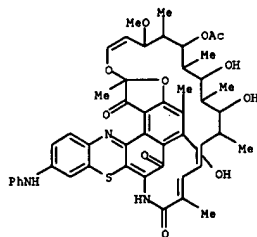
RN 74682-48-7 CAPLUS

CN 5H-Benzo[a]phenothiazine-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)

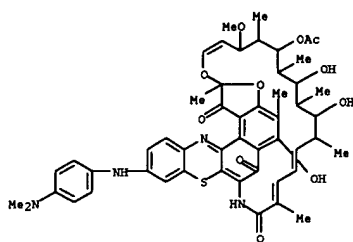


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 125749-04-4 CAPLUS
CN Rifamycin VIII, 1',4-didehydro-1-deoxy-1,4-dihydro-1-oxo-5'-(phenylamino)-8'-thio- (9CI) (CA INDEX NAME)RN 125749-05-5 CAPLUS
CN Rifamycin VIII, 1',4-didehydro-1-deoxy-5'-[4-(dimethylamino)phenylamino]-1,4-dihydro-1-oxo-8'-thio- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:473489 CAPLUS
 DOCUMENT NUMBER: 109:73489
 TITLE: Preparation of [(hydroxymethyl)aminobenzoxazino- and aminobenzothiazino]rifamycins as antibacterial agents
 INVENTOR(S): Yamane, Takehiko; Hashizume, Takushi; Yamashita, Katsuji; Hosoe, Kazunori; Watanabe, Kiyoshi
 PATENT ASSIGNER(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKKKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62240688	A2	19871021	JP 1986-84846	19860412
			JP 1986-84846	19860412

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): CASREACT 109:73489

G1 For diagram(s), see printed CA issue.

AB The title rifamycin analogs [I; X = O, S; R = CH₂OH; R₁ = NR₂R₃, Q, Q₁; R₂ = H, C1-3 alkyl, CH₂CH₂OH; R₃ = H, C1-3 alkyl, (CH₂)₂CH₂; X₂ = OH, CO₂H, CH(OH)CH₂OH, NR₄R₅; R₄, R₅ = H, C1-3 alkyl; Q = 3-8 membered C2-7 cyclic amino substituted by R₆; R₆ = H, OH, CONH₂, CH₂NH₂ C1-4 alkoxy carbonyl; l = 1-4; m, n = 1-5; X₃ = O, NR₇; R₇ = H, C1-4 alkyl, CH₂CH₂OH, C1-4 alkoxy carbonyl, C1-3 alkanyl, morpholinocarbonylmethyl] (II) were prepared as antibacterial agents. Reaction of 50g 4,3-Cl(O₂N)C₆H₂CHO with 194.1 g Na₂S in H₂O under reflux and treatment of the resulting 33.3 g 2,4-H₂N(OHC)C₆H₃ONa with ZnCl₂ in H₂O gave 29.1 g 2,4-H₂N(OHC)C₆H₃OH Zn salt which was stirred with 100g 3-bromorifamycin S in EtOH for 3 h at room temperature to give 59.3 g I (X₁ = S, R = CHO, R₁ = H). Reduction of 30g the latter with NaBH₄ in EtOH gave 28.8g I (X₁ = S, R = CH₂OH, R₁ = H) which (415 mg) was reacted with 338 mg MeCH₂.HCl in MeOH containing 0.56 mL Et₃N for 22 h at room temperature to give 80 mg I (X₁ = S, R = CH₂OH, R₂ = NMe₂) (III).

III showed min. inhibitory concns. of 0.02-2.5 μM against Micrococcus luteus and five other bacteria.

IT 97189-52-1P 114668-88-1P 114668-90-5P

114668-91-6P 114668-92-7P 114668-93-8P

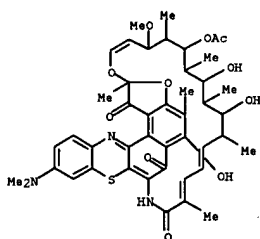
114668-94-9P 114668-95-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as antibacterial agent)

RN 97189-52-1 CAPLUS

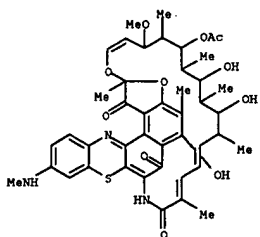
CN Rifamycin VIII, 1',4-didehydro-1-deoxy-5'-(dimethylamino)-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 114668-88-1 CAPLUS

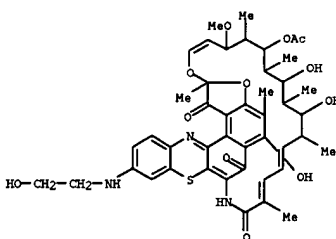
CN Rifamycin VIII, 1',4-didehydro-1-deoxy-1,4-dihydro-5'-(methylamino)-1-oxo-8'-thia- (9CI) (CA INDEX NAME)



RN 114668-90-5 CAPLUS

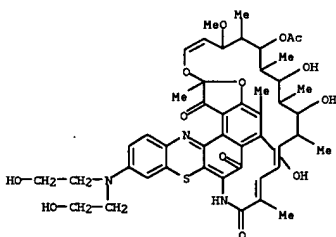
CN Rifamycin VIII, 1',4-didehydro-1-deoxy-1,4-dihydro-5'-[(2-hydroxyethyl)amino]-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 114668-91-6 CAPLUS

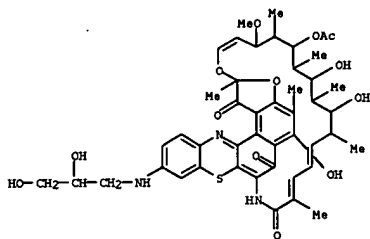
CN Rifamycin VIII, 5'-[bis(2-hydroxyethyl)amino]-1',4-didehydro-1-deoxy-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)



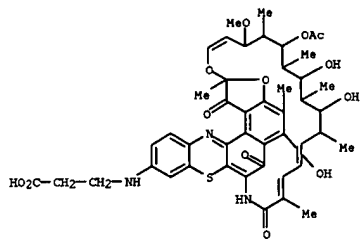
RN 114668-92-7 CAPLUS

CN Rifamycin VIII, 1',4-didehydro-1-deoxy-5'-[(2,3-dihydroxypropyl)amino]-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

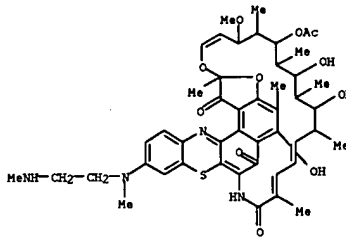


RN 114668-93-8 CAPLUS
 CN Rifamycin VIII, 5'-[(2-carboxyethyl)amino]-1',4-didehydro-1-deoxy-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

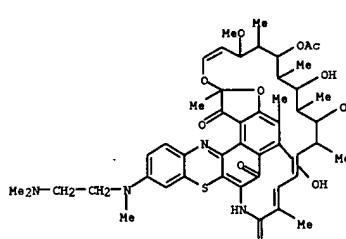


RN 114668-94-9 CAPLUS
 CN Rifamycin VIII, 1',4-didehydro-1-deoxy-1,4-dihydro-5'-[methyl(2-methylamino)ethyl]amino]-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 114668-95-0 CAPLUS
 CN Rifamycin VIII, 1',4-didehydro-1-deoxy-5'-[[2-(dimethylamino)ethyl]methylamino]-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)



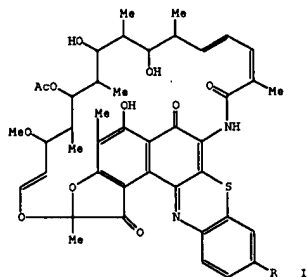
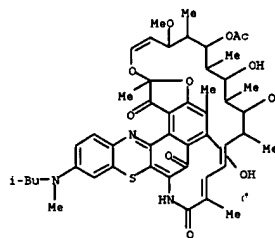
L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:424122 CAPLUS
 DOCUMENT NUMBER: 105:24122
 TITLE: Rifamycins containing substituted aminophenothiazines
 INVENTOR(S): Taguchi, Masahiro; Kitamura, Mikiya; Inochi, Koji;
 Tonomura, Miki; Tsukamoto, Goro
 PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61022090	A2	19860130	JP 1984-141721	19840709
JP 04081593	B4	19921224		
PRIORITY APPLN. INFO.:			JP 1984-141721	19840709

GI

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB Antitubercular title rifamycins I (R = Me₂CHCH₂NMe, piperidino) were prepared. Thus, 0.66 g Me₂CHCH₂NMe was added to 5.0 g I (R = H) in 80 mL DMF, the mixture allowed to react 7 days at room temperature, and the product

purified by silica gel column chromatog. to give 2.1 g I (R = NMeCH₂CHMe₂), whose MIC against Mycobacterium tuberculosis was 0.005 µg/mL vs. 0.02 for rifampicin.

IT 102865-45-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as tuberculostatic)

RN 102865-45-2 CAPLUS

CN Rifamycin VIII, 5'-[methyl(2-methylpropyl)amino]-8'-thia- (9CI) (CA INDEX NAME)

<05/11/2005>

Habte

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1985:437291 CAPLUS
 DOCUMENT NUMBER: 103:37291
 TITLE: Phenothiazine-type rifamycins
 PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKKKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

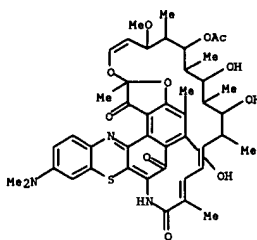
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59231092	A2	19841225	JP 1983-104699	19830611
JP 03058352	B4	19910905		

PRIORITY APPLN. INFO.: JP 1983-104699 19830611
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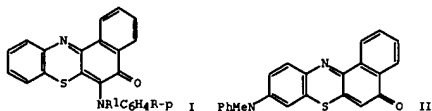
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Phenothiazine-type rifamycins I (R = H, Cl, Me, MeO, MeZn, piperazino, morpholino, 4-methyl-1-piperazinyl) were prepared by, e.g., reaction of II (X = halo) with 3,4-(HS) (HZN)CGR (III) and used as antituberculosis agents (MIC data shown against human tuberculosis H37Rv to be more potent than rifampicin and rifadin). Thus, 500 mg III (R = H) in HCONH2 was added to a mixture of 3 g II (X = Br) and 4 mL NaHCO₃-saturated H₂O in HCONH₂ at room temperature to give 74% I (R = H).
 IT 97189-52-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antitubercular activity of)
 RN 97189-52-1 CAPLUS
 CN Rifamycin VIII, 1',4-didehydro-1-deoxy-5'-(dimethylamino)-1,4-dihydro-1-oxo-8'-thia- (9CI) (CA INDEX NAME)

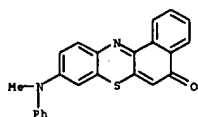
L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1985:406289 CAPLUS
 DOCUMENT NUMBER: 103:6289
 TITLE: Study of the chemistry of heterocyclic quinonimines.
 6. Direct amination of benzo[a]phenothiazin-5-one by aromatic amines
 AUTHOR(S): Afanas'eva, G. B.; Vysokov, V. I.; Chupakhin, O. N.; Ufimtseva, I. S.
 CORPORATE SOURCE: Ural. Politekh. Inst., Sverdlovsk, 620002, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1985), (1), 49-52
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 103:6289
 GI



AB Benzophenothiazinones I (R = H, Cl, Br, OMe, Me, R₁ = H; R = H, R₁ = Me, Et) were prepared from benzo[a]phenothiazin-5-one by amination with p-RC₆H₄NHR₁ in DMF containing concentrated HCl for 30 h; I (R = H, R₁ = Me) was also obtained by treating 2-chloro-3-(N-methylanilino)-1,4-naphthoquinone with the Zn salt of o-aminophenol. Addnl. obtained was benzophenothiazinone II.
 IT 96691-46-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 96691-46-2 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(methylphenylamino)- (9CI) (CA INDEX NAME)

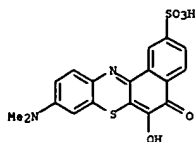


L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1985:167381 CAPLUS
 DOCUMENT NUMBER: 102:167381
 TITLE: Preventing deposition of polymer scale and a coating agent therefor
 INVENTOR(S): Shimizu, Toshihide; Kaneko, Ichiro; Shimakura, Yoshiteru
 PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 39 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 126991	A1	19841205	EP 1984-104755	19840427
R: BE, DE, FR, GB, IT, NL				
JP 59202201	A2	19841116	JP 1983-75557	19830428
JP 63056882	B4	19881109		
US 4539230	A	19850903	US 1984-601052	19840416

PRIORITY APPLN. INFO.: JP 1983-75557 A 19830428
 AB Polymer scale buildup on reactor walls in the emulsion polymerization of ethylenically unsatd. monomers is prevented by coating the walls with a composition consisting of an organic compound having 25 conjugated π bonds, a chelating agent, a metal compound capable of producing metal ions having coordination number ≥2, and optionally a silicic compound, dissolved or dispersed in a solvent, and drying the coating. Thus, a 0.5% coating composition consisting of 60 parts C.I. Solvent Black 7 [8005-02-5], 25 parts o-phenanthroline [66-71-7], and 15 parts FeCl₂ in a 80:20 water-MeOH mixture was coated on a stainless steel polymerization reactor and dried 30 min at 50°. A mixture of 40 kg water, 10 kg butadiene, 10 kg styrene, 400 g acrylic acid, 600 g Na lauryl sulfate, 500 g tert-dodecyl mercaptan, and 100 g K₂S₂O₈ was agitated 8 h at 60° to give a polymer [25085-39-6] slurry which left no scale deposition on the reactor wall, compared with 1200 g/m² for a similar polymerization in an uncoated reactor.
 IT 6379-01-7
 RL: USES (Uses) (coatings, containing chelating agents and metal compds., for scale prevention in emulsion polymerization of unsatd. compds.)
 RN 6379-01-7 CAPLUS
 CN 5H-Benzo[a]phenothiazine-2-sulfonic acid, 9-(dimethylamino)-6-hydroxy-5-oxo-, monosodium salt (9CI) (CA INDEX NAME)

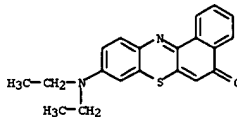
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● Na

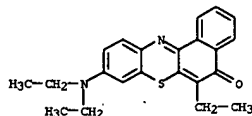
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:195085 CAPLUS
 DOCUMENT NUMBER: 100:195085
 TITLE: Dye-stuff lasers and light collectors - two new fields of application for fluorescent heterocyclic compounds
 AUTHOR(S): Raue, Roderich; Harnisch, Horst; Drexhage, Karl H.
 CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
 SOURCE: Heterocycles (1984), 21(1), 167-90
 CODEN: HETCYAH; ISSN: 0365-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Phys. principles and methods of the functioning of fluorescent solar collectors and dye lasers are discussed, together with the demands that have to be met by a fluorescent dye. A report is given of perylene carboxylic ester dyes and perylene tetracarboxylic acid diimide dyes for solar collectors, bifluorophoric laser dyes, laser dyes with intramolecular triplet quenching, and IR dyes with pyrylium and thiapyrylium terminal systems, also from the tetra and hexamethine hemicyanine ranges. The effect of cyanogen substitution on the fluorescence quantum yield in coumarin and xanthenes dyes was studied. Among the coumarin dyes are compds. suitable as energy converters in light-collecting systems, especially if the amino group is fixed by ring closure to the aromatic system as high-power laser dyes.
 IT 74682-48-7
 RL: USES (Uses)
 (for lasers and solar collectors, properties of)
 RN 74682-48-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)

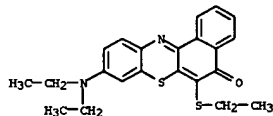


L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:53801 CAPLUS
 DOCUMENT NUMBER: 96:53801
 TITLE: Oxidative coupling of CH-acid compounds with p-phenylenediamines. VIII. Synthesis of 5H-benzo[a]phenothiazin-5-ones from naphth[2,1-d]-1,3-oxathiol-2-ones
 AUTHOR(S): Mann, G.; Wilde, H.; Hauptmann, S.; Lehmann, J.; Neumann, M.; Lepom, P.
 CORPORATE SOURCE: SEKT. Chem., Karl-Marx-Univ., Leipzig, Ger. Dem. Rep.
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1981), 323(5), 785-92
 CODEN: JPCEAO; ISSN: 0021-8383
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 96:53801
 AB Reaction of 5-hydroxynaphth[2,1-d]-3-oxathiol-2-ones with N,N-diethylquinone-1,4-diimines gives 5H-benzo[a]phenothiazin-5-ones. The same dyes are available by use of p-substituted nitrosobenzenes in HOAc, or in MeOH in the presence of O acceptors. The mechanisms of dye formation are discussed.
 IT 74677-76-2P 74677-77-3P 74677-78-4P
 74677-79-5P 74682-45-4P 74682-46-5P
 74682-47-6P 74682-48-7P 80392-06-9P
 80392-07-0P 80562-48-7P 80562-49-8P
 80562-50-1P 80562-51-2P 80562-52-3P
 80562-54-5P 80562-55-6P 80562-56-7P
 80579-55-1P 80579-56-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and spectra of)
 RN 74677-76-2 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-ethyl- (9CI) (CA INDEX NAME)

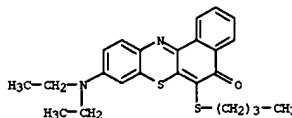


RN 74677-77-3 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(ethylthio)- (9CI) (CA INDEX NAME)

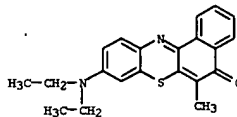


L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

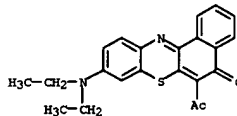
RN 74677-78-4 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-(butylthio)-9-(diethylamino)- (9CI) (CA INDEX NAME)



RN 74677-79-5 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-methyl- (9CI) (CA INDEX NAME)



RN 74682-45-4 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-acetyl-9-(diethylamino)- (9CI) (CA INDEX NAME)

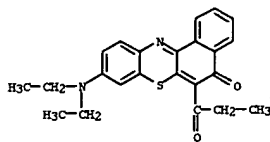


RN 74682-46-5 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1-oxopropyl)- (9CI) (CA INDEX NAME)

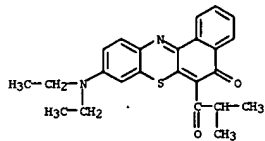
<05/11/2005>

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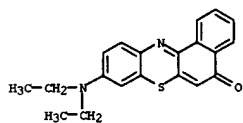
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 74682-47-6 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(2-methyl-1-oxopropyl)- (9CI) (CA INDEX NAME)

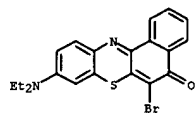


RN 74682-48-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(2-methylpropyl)- (9CI) (CA INDEX NAME)

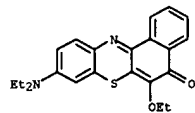


RN 80392-06-9 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-amino-9-(diethylamino)- (9CI) (CA INDEX NAME)

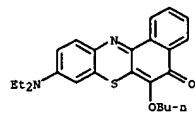
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



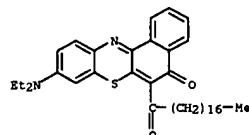
RN 80562-50-1 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-ethoxy- (9CI) (CA INDEX NAME)



RN 80562-51-2 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-butoxy-9-(diethylamino)- (9CI) (CA INDEX NAME)

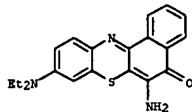


RN 80562-52-3 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1-oxooctadecyl)- (9CI) (CA INDEX NAME)

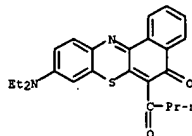


RN 80562-54-5 CAPLUS
 <05/11/2005>

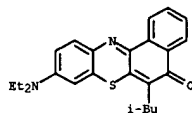
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 80392-07-0 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1-oxobutyl)- (9CI) (CA INDEX NAME)

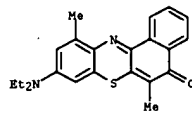


RN 80562-48-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(2-methylpropyl)- (9CI) (CA INDEX NAME)

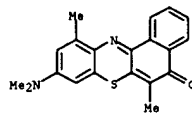


RN 80562-49-8 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-bromo-9-(diethylamino)- (9CI) (CA INDEX NAME)

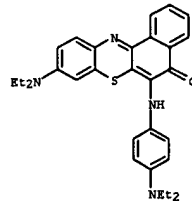
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 80562-55-6 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6,11-dimethyl- (9CI) (CA INDEX NAME)



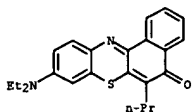
RN 80562-56-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-[[4-(diethylamino)phenyl]amino]- (9CI) (CA INDEX NAME)



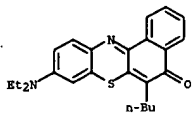
RN 80579-55-1 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-propyl- (9CI) (CA INDEX NAME)

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L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

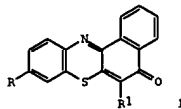


RN 80579-56-2 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-butyl-9-(diethylamino)- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

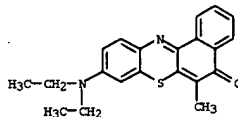
ACCESSION NUMBER: 1982:34359 CAPLUS
 DOCUMENT NUMBER: 96:34359
 TITLE: Fluorescence of 5H-benzo[a]phenothiazin-5-ones
 AUTHOR(S): Fischer, Mechthild; Fabian, Juergen; Mann, Gerhard; Wilde, Horst; Lepom, Peter
 CORPORATE SOURCE: Sekt. Chem., Tech. Univ. Dresden, Dresden, 8027, Ger. Dem. Rep.
 SOURCE: Zeitschrift fuer Chemie (1981), 21(10), 361-3
 CODEN: ZECCAL; ISSN: 0044-2402
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI



AB The absorption and fluorescence spectra of I (R = Et2N, Cl; R1 = Me, Bu, BuO, BuS, NH2, PrCO) were recorded in solvents of different polarity. The fluorescence intensity of I (R = Et2N) was highest when R1 = PrCO and lowest when R1 = BuO, BuS, or NH2. The lowest intensity was exhibited by I (R = Cl, R1 = Me). The spectra of I (R = Et2N, R1 = Me) was interpreted via PPP MO calcs., and 2 models of the chromophor system of I were discussed.

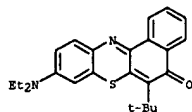
IT 74677-79-5 80392-03-6 80392-04-7
 80392-05-8 80392-06-9 80392-07-0
 RI: PRP (Properties)
 (absorption and fluorescence spectra of, solvent effect on)

RN 74677-79-5 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-methyl- (9CI) (CA INDEX NAME)

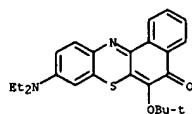


RN 80392-03-6 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1,1-dimethylethyl)-

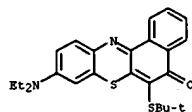
L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



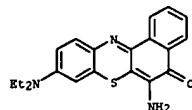
RN 80392-04-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1,1-dimethylethoxy)- (9CI) (CA INDEX NAME)



RN 80392-05-8 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-[(1,1-dimethylethyl)thio]- (9CI) (CA INDEX NAME)



RN 80392-06-9 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 6-amino-9-(diethylamino)- (9CI) (CA INDEX NAME)



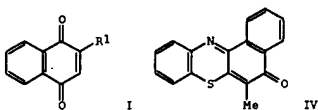
RN 80392-07-0 CAPLUS

<05/11/2005>

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L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1980:551668 CAPLUS
 DOCUMENT NUMBER: 93:151668
 TITLE: Thiazine dyes
 INVENTOR(S): Mann, Gerhard; Hauptmann, Siegfried; Wilde, Horst; Lehmann, Joachim; Naumann, Manfred
 PATENT ASSIGNEE(S): Ger. Dem. Rep.
 SOURCE: Ger. (East), 6 pp.
 CODEN: GEXXAS
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 139268	Z	19791219	DD 1978-208538	19781019
PRIORITY APPLN. INFO.:			DD 1978-208538	A1 19781019



AB Thiazine dyes, useful as magenta photog. dyes, are manufactured by reaction of

I (R1 = alkyl, aryl, or heteroaryl residue) with thiourea (II) [62-56-6] in HOAc at 80-100° for 2-6 h, hydrolyzing, separating the resultant 5-hydroxynaphth[2,1-d]-1,3-oxathiol-2-one derivative, and oxidatively coupling

with dialkyl-p-phenylenediamine or by reaction with p-nitroso-N,N-dialkylaniline in the presence of an acid acceptor. Thus, 0.075 mol II was dissolved in some 2N HCl, 0.5 mol 2-methyl-1,4-naphthoquinone [58-27-5] in 150 mL HOAc added dropwise, and the mixture stirred at 95° to give 83% 5-hydroxy-4-methylnaphth[2,1-d]-1,3-oxathiol-2-one (III) [74677-72-8]. An equimolar mixture of III and p-nitroso-N,N-diethylaniline [120-22-9] in the presence of triphenylphosphine gave 80-90% IV [74677-79-5], λ_{max} 545 nm, log ε 4.55.

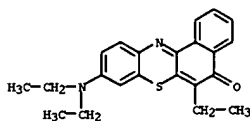
IT 74677-76-2P 74677-77-3P 74677-78-4P 74677-79-5P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (preparation and spectrum of)

RN 74677-76-2 CAPLUS

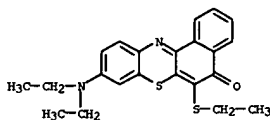
CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-ethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



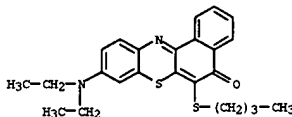
RN 74677-77-3 CAPLUS

CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(ethylthio)- (9CI) (CA INDEX NAME)



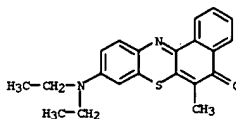
RN 74677-78-4 CAPLUS

CN 5H-Benzo[a]phenothiazin-5-one, 6-(butylthio)-9-(diethylamino)- (9CI) (CA INDEX NAME)



RN 74677-79-5 CAPLUS

CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-methyl- (9CI) (CA INDEX NAME)

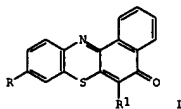


L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:515943 CAPLUS
 DOCUMENT NUMBER: 93:115943
 TITLE: Thiazine dyes
 INVENTOR(S): Mann, Gerhard; Hauptmann, Siegfried; Wilde, Horst; Lehmann, Joachim; Naumann, Manfred
 PATENT ASSIGNEE(S): Ger. Dem. Rep.
 SOURCE: Ger. (East), 9 pp.
 CODEN: GEXXAS
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 139269	Z	19791219	DD 1978-208539	19781019
PRIORITY APPLN. INFO.:			DD 1978-208539	A1 19781019



AB Thiazines I (R = auxochromic group; R1 = alkyl, aryl, acyl, optionally substituted heterocyclic group, substituted mercapto or amino), hydrolysis-resistant magenta dyes showing no secondary absorption in the 400-500 nm range, are prepared by reaction of a 5-hydroxynaphth[2,1-d]-1,3-oxathiol-2-one derivative or its 4-substituted analog with a p-nitroso-N,N-dialkylaniline in the presence of an oxygen acceptor or with a dialkyl-p-phenylenediamine under oxidative conditions. Typical of the dyes prepared are I (R = Et2N, R1 = H) [74682-46-7], λ_{max} 560 nm, log ε 4.38, and I (R = Et2N, R1 = PhNHCO) [74682-49-8], λ_{max} 600 nm, log ε 4.71. Four other I were prepared

IT 74682-44-3P 74682-45-4P 74682-46-5P

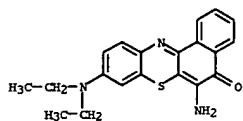
74682-47-6P 74682-48-7P 74682-49-8P

RL: IMF (Industrial manufacture); PREP (Preparation) (photog. dye, preparation and spectrum of)

RN 74682-44-3 CAPLUS

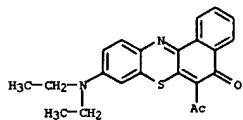
CN 5H-Benzo[a]phenothiazin-5-one, 6-amino-9-(diethylamino)-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

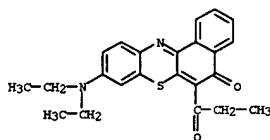


● HCl

RN 74682-45-4 CAPLUS
CN 5H-Benzo[a]phenothiazin-5-one, 6-acetyl-9-(diethylamino)- (9CI) (CA INDEX NAME)

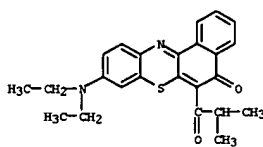


RN 74682-46-5 CAPLUS
CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(1-oxopropyl)- (9CI) (CA INDEX NAME)

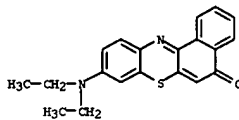


RN 74682-47-6 CAPLUS
CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-6-(2-methyl-1-oxopropyl)- (9CI) (CA INDEX NAME)

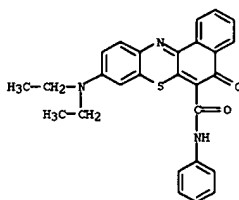
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



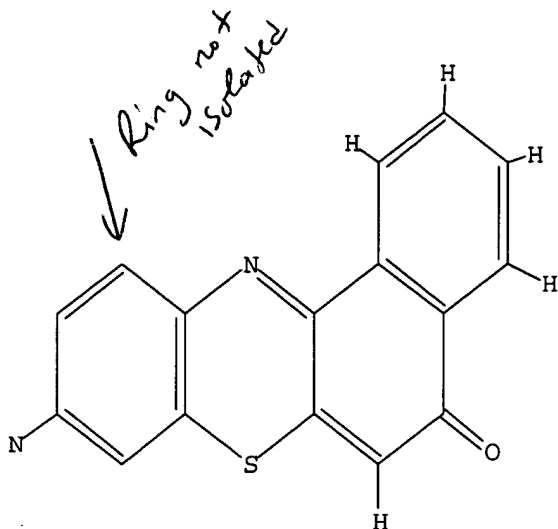
RN 74682-48-7 CAPLUS
CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)



RN 74682-49-8 CAPLUS
CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)-5-oxo-N-phenyl- (9CI) (CA INDEX NAME)



Claim 1
narrow search



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 09:51:57 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 14 TO ITERATE

100.0% PROCESSED 14 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 56 TO 504

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

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=> s ll sss full
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FULL SEARCH INITIATED 09:52:04 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 418 TO ITERATE

100.0% PROCESSED 418 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L3 2 SEA SSS FUL L1

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.76

161.97

FILE 'CAPLUS' ENTERED AT 09:52:48 ON 11 MAY 2005

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FILE LAST UPDATED: 10 May 2005 (20050510/ED)

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L4 5 L3

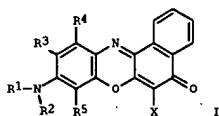
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L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 2003:591159 CAPLUS
 DOCUMENT NUMBER: 139:157136
 TITLE: Nile red type compound emitting red light, process for producing the same, and luminescent element utilizing the same
 INVENTOR(S): Nakaya, Tadao; Tajima, Akio; Saikawa, Tomoyuki; Takano, Shinji; Yamauchi, Takao; Mori, Hidenasa
 PATENT ASSIGNEE(S): Taiho Industries, Co. Ltd., Japan
 SOURCE: PCT Int. Appl., 112 pp.
 CODEN: PIXX22
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

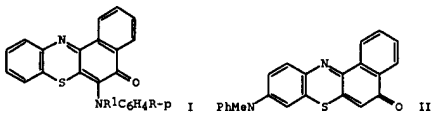
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062213	A1	20030731	WO 2003-JP477	20030121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MY, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003277371	A2	20031002	JP 2002-14881	20020123
JP 2004018400	A2	20040122	JP 2002-172127	20020612
JP 2003277369	A2	20031002	JP 2003-12498	20030121
EP 1475372	A1	20041110	EP 2003-701142	20030121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPL. INFO.: JP 2002-12222 A 20020121				
JP 2002-12224 A 20020121				
JP 2002-14881 A 20020123				
JP 2002-172127 A 20020612				
JP 2001-313245 A 20011010				
WO 2003-JP477 W 20030121				

OTHER SOURCE(S): MARPAT 139:157136
 GI

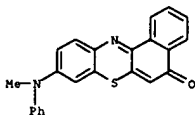


L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 1985:406289 CAPLUS
 DOCUMENT NUMBER: 103:6289
 TITLE: Study of the chemistry of heterocyclic quinonimines. 6. Direct amination of benzo[a]phenothiazin-5-one by aromatic amines
 AUTHOR(S): Afanas'eva, G. B.; Vysokov, V. I.; Chupakhin, O. N.; Ufimtseva, I. S.
 CORPORATE SOURCE: Ural. Politekh. Inst., Sverdlovsk, 620002, USSR
 SOURCE: Khimiya Geterotsiklicheskh Soedinenii (1985), (1), 49-52
 CODEN: XGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 103:6289
 GI

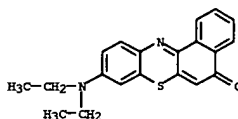


AB Benzophenothiazinones I (R = H, Cl, Br, OMe, Me, R1 = H; R = H, R1 = Me, Et) were prepared from benzo[a]phenothiazin-5-one by amination with p-NC6H4NHR1 in DMF containing concentrated HCl for 30 h; I (R = H, R1 = Me) was also obtained by treating 2-chloro-3-(N-methylanilino)-1,4-naphthoquinone with the Zn salt of o-aminothiophenol. Addnl. obtained was benzophenothiazinone II.
 IT 96691-46-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 96691-46-2 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(methylphenylamino)- (9CI) (CA INDEX NAME)



L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

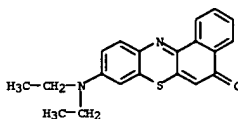
AB The invention relates to a Nile red-based red-emitting compound represented by I (R1-2 = H and alkyl; R3(R5) = H and may combine with R1(R2) to form a ring; R4 = H and may combine with R3 to form a ring; X = H, halo, and -CH(CN)Ar). The compound is suited for use as a red-emitting material in an organic light emitting device.
 IT 74682-48-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (nile red type compound for red-emitting organic LED)
 RN 74682-48-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

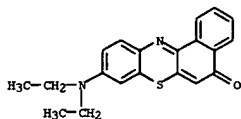
L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 1984:195085 CAPLUS
 DOCUMENT NUMBER: 100:195085
 TITLE: Dyestuff lasers and light collectors - two new fields of application for fluorescent heterocyclic compounds
 AUTHOR(S): Raue, Roderich; Harnisch, Horst; Drexhage, Karl H.
 CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
 SOURCE: Heterocycles (1984), 21(1), 167-90
 CODEN: HETCYM; ISSN: 0385-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Phys. principles and methods of the functioning of fluorescent solar collectors and dye lasers are discussed, together with the demands that have to be met by a fluorescent dye. A report is given of perylene carboxylic ester dyes and perylene tetracarboxylic acid diimide dyes for solar collectors, bifluorophoric laser dyes, laser dyes with intramol. triplet quenching, and IR dyes with pyrylium and thiapyrylium terminal systems, also from the tetra and hexamethine hemicyanine ranges. The effect of cyanogen substitution on the fluorescence quantum yield in coumarin and xanthene dyes was studied. Among the coumarin dyes are compds. suitable as energy converters in light-collecting systems, especially if the amino group is fixed by ring closure to the aromatic system as high-power laser dyes.
 IT 74682-48-7
 RL: USES (Uses)
 (for lasers and solar collectors, properties of)
 RN 74682-48-7 CAPLUS
 CN 5H-Benzo[a]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

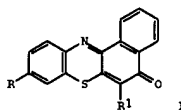
ACCESSION NUMBER: 1982:53801 CAPLUS
 DOCUMENT NUMBER: 96:53801
 TITLE: Oxidative coupling of *Ch*-acid compounds with *p*-phenylenediamines. VIII. Synthesis of 5*H*-benzo[*a*]phenothiazin-5-ones from naphth[2,1-*d*]-1,3-oxathiol-2-ones
 AUTHOR(S): Mann, G.; Wilde, H.; Hauptmann, S.; Lehmann, J.; Naumann, H.; Lepow, F.
 CORPORATE SOURCE: SEKT. Chem., Karl-Marx-Univ., Leipzig, Ger. Dem. Rep.
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1981), 323(5), 785-92
 CODEN: JPCEAO; ISSN: 0021-8383
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 96:53801
 AB Reaction of 5-hydroxynaphth[2,1-*d*]-3-oxathiol-2-ones with *N,N*-diethylquinone-1,4-diamines gives 5*H*-benzo[*a*]phenothiazin-5-ones. The same dyes are available by use of *p*-substituted nitrosobenzenes in HOAc, or in MeOH in the presence of O acceptors. The mechanisms of dye formation are discussed.
 IT 74682-48-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and spectra of)
 RN 74682-48-7 CAPLUS
 CN 5*H*-Benzo[*a*]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:515943 CAPLUS
 DOCUMENT NUMBER: 93:115943
 TITLE: Thiazine dyes
 INVENTOR(S): Mann, Gerhard; Hauptmann, Siegfried; Wilde, Horst; Lehmann, Joachim; Naumann, Manfred
 PATENT ASSIGNEE(S): Ger. Dem. Rep.
 SOURCE: Ger. (East), 9 pp.
 CODEN: GEZGAS
 Patent
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 139269	Z	19791219	DD 1978-208539	19781019
PRIORITY APPLN. INFO.: GI			DD 1978-208539	AI 19781019



AB Thiazines I (R = auxochromic group; R1 = alkyl, aryl, acyl, optionally substituted heterocyclic group, substituted mercapto or amino), hydrolysis-resistant magenta dyes showing no secondary absorption in the 400-500 nm range, are prepared by reaction of a 5-hydroxynaphth[2,1-*d*]-1,3-oxathiol-2-one derivative or its 4-substituted analog with a *p*-nitroso-*N,N*-dialkylaniline in the presence of an oxygen acceptor or with a dialkyl-*p*-phenylenediamine under oxidative conditions. Typical of the dyes prepared are I (R = Et2N, R1 = H) [74682-48-7], λ_{max} 560 nm, $\log \epsilon$ 4.38, and I (R = Et2N, R1 = PhNHCO) [74682-49-8], λ_{max} 600 nm, $\log \epsilon$ 4.71. Four other I were prepared
 IT 74682-48-7P
 RL: IMP (Industrial manufacture); PREP (Preparation) (photog. dye, preparation and spectrum of)
 RN 74682-48-7 CAPLUS
 CN 5*H*-Benzo[*a*]phenothiazin-5-one, 9-(diethylamino)- (9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

